## **SIEMENS**

# **SIREMOBIL Compact**

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Installation Instructions	
LITHOSTAR Modularis Vario Adaptation	on
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## 2 Installation of LITHO Modularis Vario Adaptation

#### **Document revision level**

The document corresponds to the version/revision level effective at the time of system delivery. Revisions to hardcopy documentation are not automatically distributed.

Please contact your local Siemens office to order current revision levels.

#### **Disclaimer**

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#### Validity of instructions

These instructions apply to the installation of the LITHOSTAR Modularis Vario Adaptation.

#### Safety notes

#### **∆WARNING**

Risk of physical injury or death and property damage! **Observe** 

- the product-specific safety information in these instructions,
- the general safety information in the instructions TD00-000.860.01... and
- the general safety information according to ARTD Part 2.

Noncompliance can lead to death, physical injury or property damage.

### **∆WARNING**

#### X-ray radiation!

Noncompliance can lead to death or physical injury.

When performing service work involving the emission of X-ray radiation, you must observe the radiation protection regulations. The radiation activity must be kept as low as possible. (low kV, mA levels, short radiation time).

Keep as far away from the radiation source as possible. Radiation protection devices (lead partitions etc.) and radiationprotection clothing (lead apron) must be used.

#### Required tools, measuring equipment and aids

NOTE

All tools, measurement and auxiliary devices with the exception of those marked "\*", are listed along with their specifications in the STC (Service Tools Catalogue).

Tool kit \*

1 set Allen keys \*

1 Vacuum cleaner \*

1 Touch-up paint or 34 44 403 1 Spray paint 84 27 734

Protective ground wire resistance

meter

(e.g. Safety Tester Bender UNIMET 1000 ST.

Mat. No. 51 38 727)



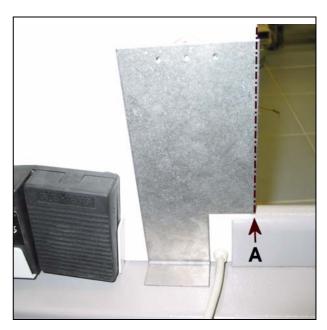


Fig. 1 Fig. 2



Fig. 3

## Work steps to be performed

NOTE

There are several versions of the SIREMOBIL Compact basic unit. Please pay attention to the corresponding notes described in the following descriptions.

#### Opening the housing

- Disconnect the system from the power supply, and pull out the power plug.
- After removing the paneling screws remove the cover of the basic unit.

#### **Drilling the mounting holes**

For existing systems, delivered after June 2003

NOTE

As from June 2003, all SIREMOBIL Compact systems will already be prepared at the factory for the installation of the LITHOSTAR Modularis Vario adaptation. This can be recognized from the existing opening at the installation location of the plug Fig. 1 and from the threaded bolt at the inside for the installation of the connector panel and relay. With these systems it is no longer necessary to drill mounting holes. Continue with the Installation of connector panel and relay paragraph

#### Drilling for systems with serial number < 1417

NOTE

Systems with serial number < 01417 have been supplied with the round fluoroscopy foot switch. The holder for this foot switch at the basic unit is located close to the right edge.

Fig. 2 shows how to place the drilling template for systems with serial number > 01417. For systems with serial number < 01417 place the drilling template offset by 15 cm to the left of the edge (A/Fig. 2).

- Place the drilling template offset by 15 cm to the left of the edge (A/Fig. 2).
- With the 3.5 mm drill supplied, drill 3 holes.
- Remove the drilling template.

**NOTE** 

Drill slowly! When doing this, make sure that the step drill is held at a right angle.

- With the step drill open up the center hole to 28 mm in diameter. The dashed line in Fig. 3 shows the 28 mm step of the step drill.
- Deburr the holes.
- Paint the 28 mm hole with a touch-up applicator.

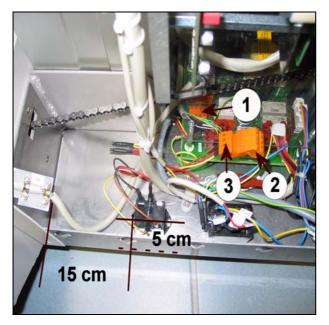
#### Drilling for systems with serial number $\geq$ 01417

- Place the drilling template on the edge (A/Fig. 2) as shown in Fig. 2.
- With the 3.5 mm drill supplied, drill 3 holes.
- Remove the drilling template.

NOTE

Drill slowly! When doing this, make sure that the step drill is held at a right angle.

- With the step drill open up the center hole to 28 mm in diameter. The dashed line in Fig. 3 shows the 28 mm step of the step drill.
- Paint the 28 mm hole with a touch-up applicator.



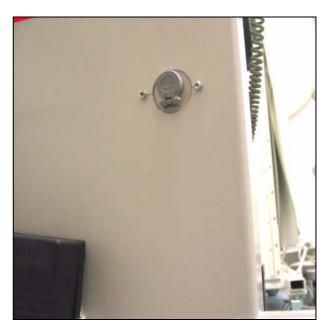


Fig. 4 Fig. 5

# Installation of connector panel and relay For existing systems, delivered after June 2003

- Remove dummy plug from the opening.
- Push the connector panel onto the threaded bolts from the inside and fasten it with 3 mm lock washers and nuts.
- Plug the relay onto the existing threaded bolts and fasten it with 3 mm lock washers, plain washers and nuts.

#### For existing systems, manufactured before June 2003

- Mark the drill hole according to Fig. 4. (15 cm distance from the left edge of the frame in the logitudinal direction / 5 cm distance from the front edge of the frame in the transverse direction, see Fig. 4).
- Bring relay into position and mark 2nd drill hole.
- With a 3.5 mm drill, drill the two mounting holes.
- Deburr the holes.
- Remove the drilling chips with a vacuum cleaner.
- Position the relay and fasten with 3 mm screws, lock washers, plain wahers and nuts.
   To do this, introduce the screws into the drill holes from below. The screw head is pointed downwards.
- Position the connector panel from the inside and fasten it with 3 mm screws, lock washers, plain washers and nuts. To do this, introduce the screws into the drill holes from the outside. The screw head is positioned on the outside.

#### Wiring

- Connect the supplied diode to relay K1.
  - Connect cathode (identified by a ring) to connection 6 (yellow cable).
  - Connect anode to connection 5 (grey cable).
- Unplug the connector D3.X6 from the board D3 (1/Fig. 4).
- Reconnect the unplugged connector to the existing plug-in connection D3.X6A at the new cable harness (2/Fig. 4 and 3/Fig. 4).
- Plug in the connector D3.X6 of the new cable harness into the plug-in connection on the D3.X6 board.
- Plug the connector D3.X10 of the new cable harness onto the contacts on the D3.X10 board.
- Fix the new cable harness using cable ties. The cables must not be in the way of any mechanically moving parts of the steering mechanism.

#### **Function check**

- Connect SIREMOBIL Compact to the monitor cart.
- Plug in the power connector.
- Switch on the system and wait for bootup of the entire system.
- Select fluoroscopy.
- Briefly activate fluoroscopy with the handswitch.



- □ It must be possible to release radiation with the hand switch.
- Switch off the system.
- Connect the SIREMOBIL Compact to the LITHOSTAR Modularis Vario.
- Switch on both systems.
- Briefly activate fluoroscopy with the hand switch.



- Radiation release with the handswich must be disabled.
- Briefly activate fluoroscopy with the LITHOSTAR Modularis Vario control unit.



- Radiation release with the LITHOSTAR Modularis Vario control unit must function.
- Switch off both systems.

#### Final work steps

- Refit all covers. Make sure the protective ground wire makes good contact.
- After all work has been completed and all covers have been attached, perform the
  protective ground wire test according to ARTD-002.731.17... The protective ground wire
  resistance must not exceed 0.2 Ohm.
- File these instructions in the system folder of the product.

## Installation of LITHO Modularis Vario Adaptation

### Changes to previous version

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Page 7 Text changed: connection 5.red cable changed to grey cable.